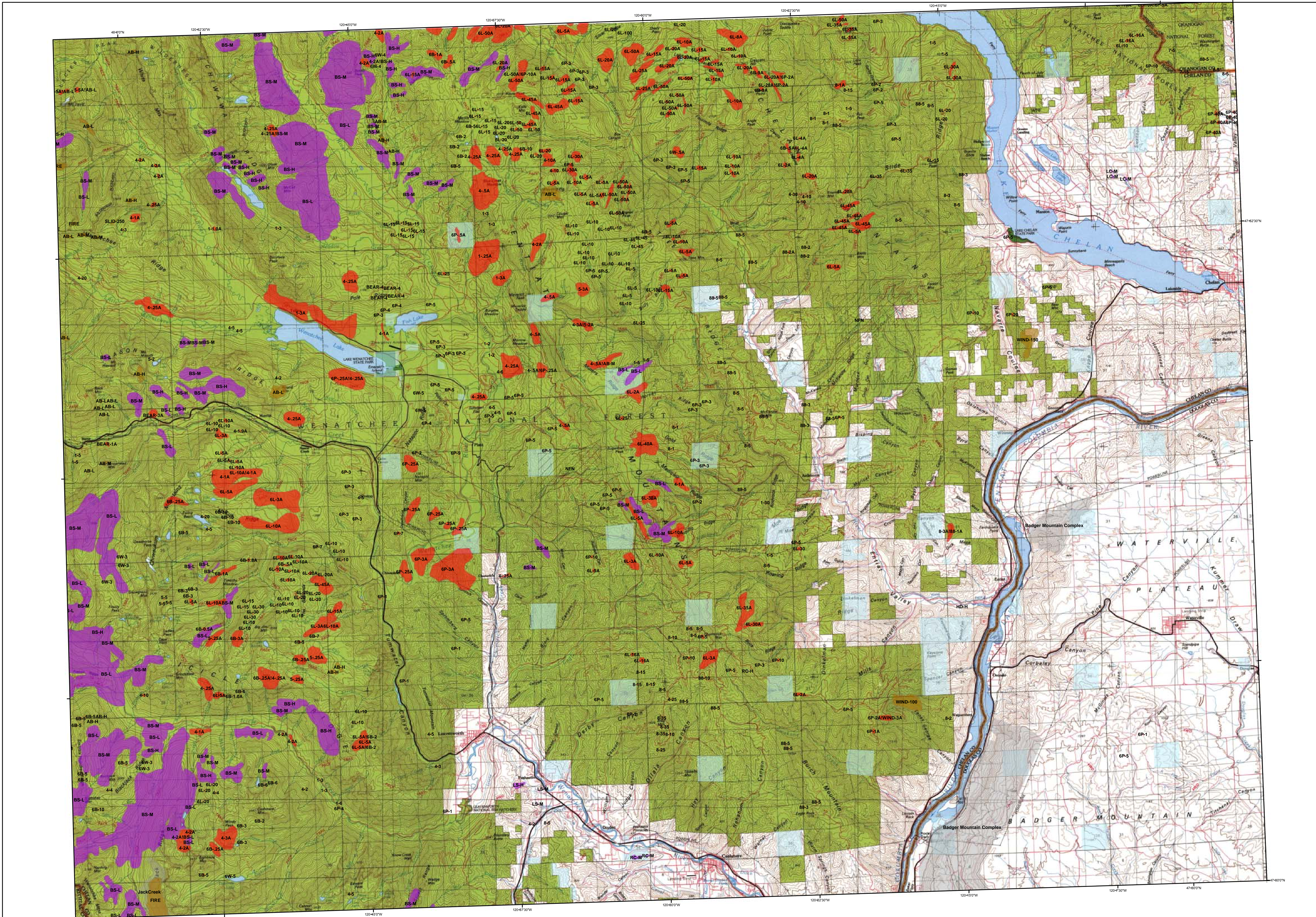


2008 Aerial Insect and Disease Survey
USGS 100K Quad: Chelan - E147120; 5C










Defoliators

Mortality Agents

Code	Damage agent	Primary Host
AS	Silky spruce	Silky spruce
BB	Western blackheaded budworm	Douglas-fir, hemlock, spruce
CB	Common budworm	White fir
BP	Spiny pine tortrix	Lodgepole, ponderosa pines
BY	Burnt's bigheaded cutworm	Douglas-fir, spruce
CH	Green spruce sawfly	Ponderosa pine
HL	Green hilled forest looper	Western larch
LG	Green striped torter looper	Douglas-fir, Western hemlock
LS	Black pine needle scale	Western larch
ML	Larch budmoth	Western larch
MS	Spiny Douglas-fir needle mine	Ponderosa pine
MS	Spiny budmoth	Ponderosa pine
ND	Needle miner	White fir
NP	Needle miner	Knap
NP	Needle miner	Jeffery pine
NP	Needle miner	Crane
NP	Needle miner	Rocky mtn
NP	Needle miner	Ponderosa pine
NP	Needle miner	Sugar pine
NP	Needle miner	Triall fir
NP	Needle miner	Western white pine
PH	Phantom butterfly	Ponderosa pine
PH	Phantom butterfly	Ponderosa pine
PN	Needle needle miner	Hemlock, Douglas-fir
PN	Needle needle miner	Ponderosa, Jeffrey pines
PN	Needle needle miner	Ponderosa, Jeffrey pines
PN	Needle needle miner	Ponderosa, Jeffrey pines
PN	Needle needle miner	Ponderosa, Jeffrey pines
PN	Needle needle miner	Ponderosa, Jeffrey pines
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PN	Needle needle miner	Ponderosa, Jeffrey pines

USGS 300K Quad: Chelan - E147120; 5C
 2008 Aerial Insect and Disease Detection Survey
 Mapscale: 1:100,000
 Date: November 19, 2008


Legend

	Defoliating Agents		2008 Large Fires Source: Northwest Coordination Center
	Mortality Agents		Areas Not Flown
	Other Damage		
	WaDNR Managed Lands Source: Washington Dept. of Natural Resources		

The map base was created with TOPOI (Copyright 2001, National Geographic); available online at: www.ngmaphstore.com

A data dictionary, digital copies of this map and Arcgis insect and disease data are available at: www.fs.fed.us/r6/nr/rfid/data.shtml

Vicinity Map



How the Aerial Surveys Are Conducted

Data represented on this map are based on trees visibly affected by forest insects and diseases detected and recorded during aerial survey flights conducted by the USDA Forest Service and the Washington Department of Natural Resources. Observers have just a few seconds to recognize the color difference between healthy and damaged trees of different species; diagnose causal agents correctly; estimate intensity; delineate the extent of damage; and precisely record this information on a georeferenced, digital map. Air turbulence, cloud shadows, distance from aircraft, haze, smoke and observer experience can all affect the quality of the survey. These data summaries provide an estimate of conditions on the ground and may differ from estimates derived by other methods.

The aerial survey provides information on the current status for many causal agents, and is important when examining insect activity trends by comparing historical and current survey data over large areas.

Overview surveys are a 'snap shot' in time and therefore may not be timed to accurately capture the true extent or severity of a particular disturbance activity. Specially designed surveys with modified flight patterns and timing may be conducted to more accurately delineate the extent and severity of a particular disturbance agent. Special surveys, such as Swiss needle cast surveys, are conducted when resources are available to address situations of sufficient economic, political or environmental importance.

DIRECT ALL INQUIRIES TO:

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Resource Protection
Forest Health
1111 Washington St. SE
Olympia, WA 98504

-- OR --

USDA Forest Service, Region 6
Natural Resources
Forest Health Protection
PO Box 3623
Portland, Oregon 97208

*****DISCLAIMER*****

The insect and disease data presented should only be used as an indicator of insect and disease activity, and should be ground-checked for precise location, extent, severity and causal agent.

Color coded polygons show locations where trees were recently killed or defoliated. Intensity of damage is variable and not all trees within coded polygons are dead or defoliated.

The cooperators reserve the right to correct, update, modify or replace GIS products without notice. Using this map for purposes other than those for which it was intended may yield inaccurate or misleading results.